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Office Action Dated December 8, 2003

REMARKS

By this paper, no claim amendments were made. Thus, Claims 1, 5-47, 56-59 and 63-69 remain pending and are presented for further examination.

I. Discussion of Rejection of Independent Claims 1,15, 24, 33, 56, 63, 66, and 67 Under 35 U.S.C. § 102(e)

In paragraph 3 of the Office action, the Examiner summarily rejected Claims 1, 5-47, 56-69, and 63-69 under 35 U.S.C. § 102(b)/(e) as being anticipated by U.S. Patent No. 6,169,728 to Perreault et al., which issued on January 2, 2001. In rejecting all claims, the Examiner stated that Perreault discloses a method and system comprising "a hub (101) that dynamically allocates one or more portions of frequency spectrum among a plurality of radio frequency (RF) transmitters and/or receivers (110s) based on the demand and state of performance of one or more groups of RF transmitters and/or receivers (see col. 5, line 39 to col. 6, line 13, col. 6, line 40 to col. 10, line 67, col. 16, line 66 to col. 22, line 65) as in claims 1, 5-47, 56-69, and 63-69." *O.A. at page 2.* The Examiner provided no other basis or reasons for rejecting all claims. *Id.*

For the reasons below, the Applicant respectfully disagrees with the Examiner's determination, and submits that Perreault fails to anticipate the rejected claims.

A. The Law of Anticipation

Anticipation under Section 102 can be found only if a reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775 (Fed. Cir. 1985). More particularly, a finding of anticipation requires the disclosure in a single piece of prior art of each and every limitation of a claimed invention. *Electro Med. Sys. S.A. v. Cooper Life Sciences*, 34 F.3d 1048, 1052 (Fed. Cir. 1994). "To anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim." *Brown v. 3M*, 265 F.3d 1349 (Fed. Cir. 2001). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

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B. Brief Description of U.S. Patent No. 6,169,728 to Perreault et al.

Perreault "provide[s] for appropriate or optimal spectrum management, providing for load balancing across various transmit and receive channels, channel (or spectrum) allocation under various types of noise or other error conditions, and for channel (or spectrum) allocation under various types of congestion conditions." *Perreault at col. 2, ll. 1-8.* Perreault describes a radio communication system that "provides for spectrum management, namely, channel allocation (or assignment), to optimize overall performance of a communication system 100." *Id. at col. 5, ll. 39-45 (see Fig. 1).* Based upon various noise conditions on a given (or first) upstream channel, in accordance with Perreault, secondary devices operating on that given upstream channel may be switched to another (or second) channel having better conditions, to increase data throughput and optimize communication system performance. *Id. at col. 6, ll. 42-47 (see also Figs. 4A and 4B).* The Perreault system monitors one or more error parameters, such as bit error rates, and compares the error parameter "with a first predetermined or adaptive threshold, and if the error parameter is not greater than the first threshold, indicating that the error parameter is sufficiently or acceptably low, then nothing further needs to be performed with regard to upstream channel allocation under noise conditions and this portion of the method may terminate, return step 250." *Id. at col. 6, l. 55 through col. 7, l. 6.*

When the channel noise parameter indicates ingress noise (e.g., RSSI is greater than a second threshold), the method selects an idle channel having the lowest channel noise parameter. *Id. at col. 7, l. 66 to col. 8 l. 3.* In accordance with Perreault, "secondary stations will only be switched to another channel if that channel is considerably better, i.e., secondary stations will not be switched from a bad channel to a bad (somewhat better) channel." *Id. at col. 8, ll. 3-10.* When the channel noise parameter indicates impulse noise in step 220, the Perreault method selects an idle channel having the highest available frequency because impulse noise tends to diminish at higher frequencies. *Id. at col. 8., ll. 54-59.* In a preferred embodiment, a selected secondary station transmitter may be transferred to a receiver having the lowest congestion parameter (i.e., having the least congestion). *Id. at col. 18, ll. 8-16.*

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C. Discussion of Distinctions of Independent Claims 1, 15, 24, 33, 56, 63, 66, and 67 in View of Perreault

In supporting the rejection of the claims, the Examiner simply cited to nearly twelve columns of the Perreault patent, without citation to any particular statement(s) in Perreault that support each particular limitation of rejected Claims 1, 5-47, 56-69, and 63-69. The Applicant submits that Perreault fails to teach or suggest all of the limitations of the rejected claims.

As noted above, Perreault discloses a system for channel (or spectrum) allocation under various types of noise or other error conditions, and for channel (or spectrum) allocation under various types of congestion conditions. (emphasis added) *Perreault at col. 2, ll. 1-8*. As evidenced from the foregoing statement, and as is clear from the detailed description of the Perreault system, Perreault uses the phrase "channel allocation" and "spectrum allocation" interchangeably to indicate "channel assignment". In particular, the Perreault system "provides for spectrum management, namely, channel allocation (or assignment), to optimize overall performance of a communication system 100." (emphasis added) *Id. at col. 5, ll. 39-45 (see Fig. 1)*. The Perreault system switches an upstream channel to another (or second) channel having better conditions, to increase data throughput and optimize communication system performance. *Id. at col. 6, ll. 42-47 (see also Figs. 4A and 4B)*. Thus, it is certainly clear that Perreault merely allocates or assigns channels to various devices.

On the other hand, Claim 1 recites a method comprising "allocating at least a portion of the RF spectrum from the group having best state of performance to at least one of the plurality of RF transmitters and receivers." *App. at Claim 1*. The applicant submits that nowhere does Perreault teach or suggest allocating at least a portion of the RF spectrum as recited in Claim 1. By switching channels for a device from, from instance, channel 1 to channel 2, the Perreault system makes no RF spectrum allocation to that device, because switching channels provides the same portion of the spectrum to that device. More particularly, when the Perreault device is reassigned from channel 1 to channel 2, the Perreault device would still use a portion (e.g., 6 MHz) of the RF spectrum in channel 2 that is equal to that portion (i.e., 6 MHz) of the RF spectrum used in channel 1. *See, e.g., Perreault at col. 1, ll. 41-46*. There is no teaching or

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suggestion in Perreault to allocate any additional or reduced portion of the RF spectrum to the device.

Since the portion of the RF spectrum used by a Perreault device is the same in channel 1 and channel 2, the net effect is that no allocation or re-allocation of the RF spectrum is made. The Perreault system merely allocates or assigns channels to a device as expressly stated in Perreault. *See, e.g., Id. at col. 5, ll. 39-45 (see Fig. 1).* Thus, the Applicant submits that the Perreault system does not, and the Examiner did not show where or how such a system does, allocate at least a portion of the RF spectrum. Perreault fails to teach or suggest a method comprising allocating at least a portion of the RF spectrum from the group having best state of performance to at least one of the plurality of RF transmitters and receivers, as recited in Claim 1. Since Perreault fails to teach or suggest all of the limitations of Claim 1, a rejection of Claim 1 under anticipation must be withdrawn. *See Electro Med. Sys. S.A. v. Cooper Life Sciences, 34 F.3d 1048, 1052 (Fed. Cir. 1994).* Finally, the Applicant notes that it would not have been obvious to one of ordinary skill in the art to recognize the invention of Claim 1 in view of the art of record. Thus, any potential rejection of Claim 1 based on obviousness would not be sustainable.

Since independent Claims 15, 24, 33, 56, 63, 66, and 67 include at least the patentable distinctions discussed above in connection with Claim 1, the Applicant submits that Claims 15, 24, 33, 56, 63, 66, and 67 and 63 are also patentable.

II. Discussion of Rejection of Dependent Claims 5-14, 16-23, 25-32, 34-47, 57-59, 64, and 65 Under 35 U.S.C. § 102(e)

As noted above, the Examiner summarily rejected Claims 1, 5-47, 56-69, and 63-69 under 35 U.S.C. § 102(e) as being anticipated by Perreault. *O.A. at para. 3.* The Examiner did not particularly point out where or how Perreault teaches or suggests all of the limitations of dependent Claims 5-14, 16-23, 25-32, 34-47, 57-59, 64, and 65.

By not articulating the specific basis for the rejection of each dependent claim, the Applicant submits that the Examiner did not meet his burden of establishing a *prima facie* case of anticipation because, in fact, Perreault fails to provide such alleged disclosure. For example, the Examiner summarily rejected dependent Claim 5, which recites "further comprising assigning

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a data rate to at least one of the plurality of RF transmitters and receivers." *App. at Claim 5.* A finding of anticipation requires the disclosure in a single piece of prior art each and every limitation of a claimed invention. *Electro Med. Sys. S.A. v. Cooper Life Sciences*, 34 F.3d 1048, 1052 (Fed. Cir. 1994). Here, the entire disclosure of Perreault fails to disclose, or even mention, any parameter of "data rate." Thus, the Examiner failed to establish a *prima facie* case of anticipation with respect to at least those dependent claims.

The Examiner is reminded that "whenever, on examination, any claim for a patent is rejected, or any objection ... made, notification of the reasons for rejection and/or objection together with such information and references as may be useful in judging the propriety of continuing the prosecution (35 U.S.C. 132) should be given." *M.P.E.P. § 707*. The Applicant submits that the Examiner's summary rejection of the claims, without citing to specific portion(s) of the above references for each claim, respectively, amounts to depriving the applicant of the opportunity to respond completely and with particularity as to why the claims are patentable.

Without waiving Applicant's right to have the Examiner communicate particular reasons why each claim is rejected, the Applicant submits that dependent claims nevertheless are patentable in view of the art of record. Since each of Claims 5-14, 16-23, 25-32, 34-47, 57-59, 64, and 65 depends either directly or indirectly on one of Claims 1, 15, 24, 33, 56, 63, 66, and 67, the Applicant submits that those dependent claims are also allowable.

III. Discussion of the Rejection of Claims 68 and 69 Under 35 U.S.C. § 102(e)

With respect to independent Claim 68, the Applicant submits that Perreault fails to, and the Examiner did not explain where and how does Perreault, teach or suggest a method comprising "reducing the size of RF bandwidth that is assigned to the least congested group of transmitters", as recited in Claim 68. Further, Perreault fails to teach or suggest a method comprising "increasing the size of RF bandwidth that is assigned to the other group of transmitters", as recited in Claim 68. Because the Examiner failed to point out where or how Perreault teaches such or all of the limitations of Claim 68, the Applicant submits that the Examiner failed to establish a *prima facie* case of anticipation as required by law. Further, it would not have been obvious at the time of the invention to one of ordinary skills in the art to

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recognize the invention of Claim 68 in view of the art of record. Thus, any potential rejection of Claim 68 based on obviousness would not be sustainable.

Therefore, the Applicant submits that Claim 68 is allowable. Since Claim 69 depends from Claim 68, the Applicant submits that Claim 69 is allowable.

IV. Response to Examiner's Comment Regarding U.S. Patent No. 6,658,010 to Enns et al.

In paragraph 4 of the Office Action, the Examiner stated that "Enns et al. is additionally cited to show the feature of bandwidth allocation management in broadband communication system similar to the claimed invention." *O.A. at para.* The Applicant submits that Enns fails to teach all of the limitations of the pending claims. Thus, any potential rejection of the claims based on Enns would not be sustainable.

V. CONCLUSION

Applicant has endeavored to address all of the Examiner's concerns as expressed in the Office Action. Further, the Applicant submits that the claim limitations above represent only illustrative distinctions. Hence, there may be other patentable features that distinguish the claimed invention from the prior art.

Since the Examiner did not explain why or how the prior art discloses all of the limitations of at least the dependent claims, the Applicant respectfully requests the Examiner to "clearly articulate any rejection early in the prosecution process so the applicant has the opportunity to provide evidence of patentability and otherwise respond completely at the earliest opportunity." *See M.P.E.P. § 706.* More particularly, the Examiner is requested to provide the Applicant with specific citations to the reference(s) and to explain where and how the reference(s) anticipates each claim. If the Examiner finds such further rejection of the claims necessary, the Applicant should be entitled to have at least one opportunity to respond without having the burden of filin a request for continued examination (RCE).

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections and, particularly, that all claims be allowed. If the Examiner finds

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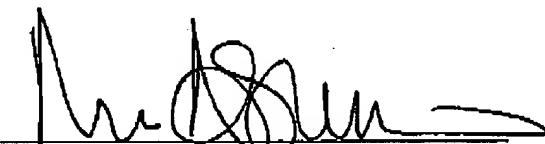
any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, the Examiner is respectfully invited to call the undersigned.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,
KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: March 8, 2004

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